

Rachel Carson NWR - Narrative Report -
1969

RACHEL CARSON NATIONAL WILDLIFE REFUGE
MAINE

Under the Supervision of
Parker River National Wildlife Refuge
Newburyport, Massachusetts

NARRATIVE REPORT
Calendar Year 1969

Temporary Personnel

| | <u>Entered on Duty</u> | <u>Terminated</u> |
|-------------------------------------|------------------------|-------------------|
| Edward R. Cormier Maintenanceman | 1/1/69 | 3/21/69 |

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NARRATIVE REPORT

RACHEL CARSON NATIONAL WILDLIFE REFUGE

Jan. - Dec. 1969

General

A. Weather Conditions.

The following data on weather was obtained from the U. S. Weather Bureau Office in Portland, Maine located in close proximity to the proposed northernmost unit of the Rachel Carson National Wildlife Refuge, the Spurwink area.

January 1969 was a pleasant month with an average temperature 2° above normal, and only 5" of snow compared with a normal of 20". February had two major snowstorms with a total of 61" of snowfall. March saw only one major storm on the 25th in which 1.60" of rain fell. April was normal with no snow and had a high temperature of 70°. May had below normal precipitation and a high temperature of 87° on the 17th. June was normal with one squall line coming through on the 20th that brought an inch of rain. July was cloudy and cool generally but did have three consecutive days of 90° or above temperature and an excess of precipitation (2.57") from the monthly normal. August was the 2nd warmest month since 1876. September was dry with 92% of the rain falling between the 7th and 9th and had a heavy frost on the 21st. October produced a snowstorm on the 22nd and 23rd with 3.8" falling. November had an extended wet spell in the first half when 7.85" of rain fell and the only snow was 10 minutes of flurries on the last day. December had more precipitation than any earlier December on record 9.69" and a 0° temperature on the 25th.

| | <u>Precipitation</u> | | | <u>Temperature</u> | |
|----------|----------------------|-------------------|----------------|--------------------|----------------|
| | <u>Snowfall</u> | <u>This Month</u> | <u>Average</u> | <u>Maximum</u> | <u>Minimum</u> |
| Jan. | 5.4 | 3.63 | | 47 | -5 |
| Feb. | 61.2 | 6.28 | | 42 | -6 |
| Mar. | 9.3 | 3.36 | | - | - |
| Apr. | T | 2.86 | | 70 | 14 |
| May | | 1.67 | | 87 | - |
| June | | 3.53 | | 88 | 41 |
| July | | 5.45 | | 93 | 46 |
| Aug. | | 2.20 | | 92 | 46 |
| Sept. | | 5.28 | | 93 | 36 |
| Oct. | 3.8 | 2.51 | | 72 | 22 |
| Nov. | T | 8.54 | | 59 | 14 |
| Dec. | 24.7 | 9.69 | | - | - |
| Totals | 104.4 | 55.00 | 42.8 | | |
| Extremes | | | | 93 | -6 |

B. Habitat Conditions.

1. Water: The water in all units of the refuge acquired and optional to date is tidal. The mean tidal range of the lower units is 8.7 feet and the spring range is 9.9 feet. The highest tide is estimated as 13.5 feet above, and the lowest tide 3.5 feet below mean low water. All nine units are elevated above the level of the tidal streams which have cut rather deep channels through them.
2. Food and Cover: Vegetation is a combination of salt meadow cordgrass (Spartina patens), short salt marsh cordgrass (Spartina cordgrass) and salt grass (Distichlis spicata). In the highest marshes, salt marsh golden rod (Solidago semper-virens), orache (Atriplex hastata), plantain (Plantago maritima), sea lavender (Limonium nashii), and black grass (Juncus gerardi), are abundant. In a number of spots, three-square (Scirpus robustus) is common.

Food and cover was assumed to be adequate in all units,

II. Wildlife

A. Migratory Birds1. Waterfowl.

No significant observations were made this year.

Recent State of Maine winter waterfowl inventory figures for 1965 - 1969 are given below for reference and comparative purposes. This information was obtained from State biologists who regularly each January have flown the forty-five mile stretch of coastline in which the nine Rachel Carson units are located (their unit 8). It is probable that the majority of these birds were observed off-shore or in rivers rather than on coastal marsh land units of the refuge.

WINTER INVENTORY DATA RACHEL CARSON AREA

| | <u>1965</u> | <u>1966</u> | <u>1967</u> | <u>1968</u> | <u>1969</u> |
|--------------|-------------|-------------|-------------|-------------|-------------|
| Canada Geese | | | | 290 | 285 |
| Black Duck | 1530 | 1207 | 700 | 1180 | 2805 |
| Goldeneye | 1539 | 483 | 400 | 210 | 355 |
| Bufflehead | 164 | 45 | 250 | 90 | 60 |
| Scoter | 140 | 304 | 200 | 520 | 90 |
| Eider | 5934 | 721 | 3500 | 1290 | 1915 |
| Old Squaw | 138 | 45 | 200 | 80 | - |
| Miscel. | 259 | 229 | 100 | 60 | |
| | <u>9704</u> | <u>3034</u> | <u>5350</u> | <u>3430</u> | <u>5225</u> |

Remarks:

1. Winter inventory count concentrates mainly on black ducks as the target species.
2. Data for 1968 and 1969 provided by J. William Peppard, Waterfowl Research Leader, Maine Dept. of Inland Fisheries and Game. Previous years information from former Waterfowl Research Leader Howard E. Spencer, Jr.

III. Refuge Development and Maintenance

A. Physical Development.

1. This year placement of 10-foot sign posts to witness the boundary markers placed by the surveyors of the Bureau's Division of Engineering came to a standstill due to lack of acquisition funds. The number of witness posts set to date is shown by unit in the table below.

| | |
|--------------|----|
| Moody | 17 |
| Lower Wells | 6 |
| Little River | 10 |
| Goose Rocks | 4 |

Most of these posts necessitated the use of an air compressor and jack hammer to drill a three inch hole through ledge to set the posts.

2. Land Acquisition. Land acquisition records as of Dec. 31, 1969 indicate that 1,309.09 acres have been deeded to the Bureau. Fifty-four acres are under option. One option was taken this year for a total of 5 acres. The sum of deeded plus optional land represents approximately 34 percent of the total approved acquisition.

IV. Resource Management

Not applicable.

V. Field Investigations or Applied Research

Not applicable.

VI. Public Relations.

A. Recreational Use.

Shellfishing, hunting, finfishing, and nature study are the major recreational uses of the area.

B. Refuge Visitors.

The Division of Engineering Survey crew headed by Joseph Daigle closed their Kennebunk office in April this year. This office received occasional visitors but no record was maintained by the engineers.

C. Refuge Participation.

Not applicable.

D. Hunting.

As a result of an incomplete, piecemeal ownership pattern, no areas of the refuge were posted and closed to hunting. Several waterfowl blinds are still being maintained on the marshes by private individuals and it is assumed that they are used occasionally.

E. Violations.

Not applicable.

F. Safety.

1. Safety meetings are held at Parker River Refuge on a monthly basis. The Rachel Carson maintenanceman attended these meetings.

VII. Other Items

- A. 1. The name Coastal Maine N. W. Refuge was formally changed to Rachel Carson N. W. Refuge in October to honor the late conservation great who spent many years of her life in Maine.
2. All NR forms except 3-123 are omitted this year due to the fact no significant observations were made.
3. Refuge Manager Moses, Staff Specialist French, and Regional Planner Suich toured the southernmost units on December 17 in search of a suitable site for the proposed Rachel Carson dedication ceremony scheduled for the spring of 1970. An excellent site on U. S. tract 314 in the Upper Wells Unit was selected.

4. Credits:

Sections IV, V, VI, and VII - E. S. Moses
Sections I and II - W. R. Forward
Sections III - T. J. Stubbs

Reviewed by:

Submitted by:

Thomas DeLoe 1/9/70
Signature Date

Edward S. Moses 1-23-70
Signature Date

NR's Checked in R. O. by Homan

MONTHLY RECREATIONAL USE REPORT

Refuge name
Rachel Carson N. W. Refuge
State
MAINE

| State Code <u>19</u> (1-2) | | Congressional District Code <u>01</u> (3-4) | | Refuge Code <u>505</u> (5-7) | | Report Yr. Mo. Period <u>69</u> <u> </u> (8-11) | |
|---|------|---|----------------|--|------|--|----------------|
| (Card Columns). (12-13) (14-18) (19-25) | | (Card Columns). (12-13) (14-18) (19-25) | | | | | |
| ACTIVITY | Code | VISITS FOR THE MONTH | | ACTIVITY | Code | VISITS FOR THE MONTH | |
| | | Total Number | Total Hours | | | Total Number | Total Hours |
| Hunting: Big Game | 01 | | | On-Site Programs | 22 | | |
| Upland Game | 02 | | | *Miscellaneous Wildlife | 23 | | |
| Waterfowl | 03 | | | | | | |
| Other Migratory | 04 | | | Swimming | 24 | | |
| Other | 05 | | | Boating | 25 | | |
| Bow | 06 | | | Water Skiing | 26 | | |
| Fishing: Salt Water | 07 | 500 | 2,000 | Camping | 27 | | |
| Warm Water | 08 | | | Group Camping | 28 | | |
| Cold Water | 09 | | | Picnicking | 29 | | |
| Environmental Education | 10 | | | Horseback Riding | 30 | | |
| Wildlife Photography | 11 | 200 | 400 | Bicycling | 31 | | |
| Wildlife Observation | 12 | 4,450 | 8,900 | Winter Sports | 32 | | |
| Conducted Programs | 13 | | | Fruit, Nut and Vegetable Collecting | 33 | | |
| Field Trials | 14 | | | *Miscellaneous Non-Wildlife | 34 | | |
| Wildlife Trails | 15 | | | Peak Load Day | 35 | 400 | |
| Wildlife Tours/Routes | 16 | 12,300 | 12,300 | Actual Visits | 36 | 14,100 | |
| Visitor Contact Stations | 17 | | | | | | |
| Camping (wildlife related) | 18 | | | Fee Area Use | 37 | | |
| Picnicking (wildlife related) | 19 | 980 | 490 | Number of Fee Areas | 38 | (14-18) | |
| Wildlife Interpretive Center | 20 | | | Fee Collections | 39 | \$ | |
| Off-Site Programs | 21 | | | Collection Costs | 40 | \$ | |